

**IN THE UNITED STATE DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS**

DYNOCOM INDUSTRIES, INC.,

Plaintiff,

v.

MAGICMOTORSPORT S.R.L.

Defendant.

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C.A. No.: 1:23-cv-12648

**PLAINTIFF’S OPENING CLAIM CONSTRUCTION BRIEF**

## I. Introduction

Pursuant to the Court's Scheduling Order (Dkt. No. 21), as amended by an Order dated June 26, 2024 (Dkt. No. 36), Plaintiff, Dynocom Industries, Inc. ("Plaintiff" or "Dynocom") respectfully submits this Opening Claim Construction Brief for proper construction of disputed terms in United States Patent No. 8,505,374 (the "'374 Patent"). A true and correct copy of the '374 Patent is attached hereto as Exhibit A ("Ex. A").

Dynocom's '374 Patent claims a portable on-vehicle dynamometer ("POD") as its invention. As detailed in the Complaint, Defendant, Magicmotorsport S.R.L., is infringing this patent by offering to sell its chassis dynamometer branded as the DynoMag in the United States (Dkt. No. 1). However, this is not the first time the claimed invention of the '374 Patent has been copied.

In 2016, Dynocom brought suit against two other companies, Mainline Automotive Equipment Pty. Ltd. and Mainline Dynolog Dynamometers, that were selling a similar knockoff dynamometer. In 2017, the District Court for the Eastern District of Texas issued a claim construction order for a number of terms in the '374 Patent, many of which are identical to the disputed terms in this case. *See Dynocom Industries Inc. v. Mainline Automotive Equipment, et al.*, 2017 WL 3020826, \*4-9 (E.D. Tex. 2017). The Texas district court's prior claim construction ruling is attached hereto as Exhibit B ("Ex. B").

Although the *Dynocom v. Mainline* case settled out of court, Plaintiff still proposes constructions for the disputed terms that are practically the same, if not identical, to those of the prior ruling because they are correct. As Plaintiff will now demonstrate, intrinsic evidence and case law support its constructions.

## II. Legal Standards of Claim Construction

A patent is a written instrument informing the public of the patentee’s right to exclude. As such, it is very much like a contract. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 319 (2015) (“[T]he Court pointed out that a judge, in construing a patent claim, is engaged in much the same task as the judge would be in construing other written instruments, such as deeds, contracts, or tariffs.”) (citing *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 384, 386, 388, 389 (1996)). Accordingly, the step of claim construction is analogous to a court’s role in construing contractual language. *Teva*, 574 U.S. at 319.

The purpose of claim construction is to determine the plain, ordinary, and customary meaning of claim terms to a person of ordinary skill in the art (“POSITA”) at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc) (the plain and ordinary meaning is evaluated “at the time of the invention, i.e., as of the effective filing date of the patent application.”). A POSITA is a hypothetical person that is skilled in the field of invention to which the patent pertains and is presumed to be aware of all the pertinent prior art. *Standard Oil Co. v. Am. Cyanamid Co.*, 774 F.2d 448, 454 (Fed. Cir. 1985) (“...that hypothetical person who is presumed to be aware of all the pertinent prior art”). “Properly viewed, the ‘ordinary meaning’ of a claim term is its meaning to the ordinary artisan after reading the entire patent.” *Phillips*, 415 F.3d at 1321.

Now, while the ordinary meaning of claim terms must be determined in light of the entire patent, a court must “avoid the danger of reading limitations from the specification into the claim.” *Id* at 1323. “For instance, although the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.” *Id*; see *Nazomi Communications, Inc. v. ARM Holdings, PLC*, 403 F.3d 1364, 1369 (Fed. Cir.

2005)(claims may embrace “different subject matter than is illustrated in the specific embodiments in the specification”). This “is not just because section 112 of the Patent Act requires that the claims themselves set forth the limits of the patent grant, but also because persons of ordinary skill in the art rarely would confine their definitions of terms to the exact representations depicted in the embodiments.” *Phillips*, 415 F.3d at 1323. Accordingly, there is a “heavy presumption that claim terms are to be given their ordinary and customary meaning” because “the words of the claims themselves...define the scope of the patented invention.” *Aventis Phram., Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013); *Phillips*, 415 F.3d at 1312-13; *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

“A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.” *Merck & Co. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005). When necessary to construe a claim, intrinsic evidence is usually dispositive because “it is the single best guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315 (citing *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). The intrinsic evidence consists of: (1) the patent claims, (2) the patent specification, which includes the written description and drawings, and (3) the patent’s prosecution history. *Id.*; see *Kara Technology Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009). When a claim term is clearly defined in the intrinsic record, the term must be given that meaning as a matter of law. *Edwards Lifesciences LLC v. Cook, Inc.*, 582 F.3d 1322, 1329 (Fed. Cir. 2009).

Extrinsic evidence has limited applicability to claim construction. The extrinsic evidence “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Phillips*, 415 F.3d at 1317-19. It is only (a) after the Court has considered all available intrinsic evidence, and (b) after the Court has

determined the patent record presents “genuine ambiguity,” that extrinsic evidence may even be considered. *Vitronics*, 90 F.3d at 1584. While extrinsic evidence may be considered, it cannot be used to contradict a claim meaning that is unambiguous in light of the intrinsic evidence. *Phillips*, 415 F.3d at 1324.

### III. Agreed Constructions

Term	Agreed Construction
load shaft	a shaft to which power can be transferred from the drive shaft
hub coupling	a device designed to allow a mechanical connection to the drive shaft
connected directly	fixed securely
fixed positions	two or more fixed positions

Pursuant to the Joint Claim Construction Chart dated July 17, 2024 (Dkt. No. 37), the parties agree to the constructions for the terms “load shaft,” “hub coupling,” “connected directly,” and “fixed positions.” These constructions are supported directly in the language of the claims and the specification and should be adopted because the “proper definition” for a claim term is the one that is “ascertain[ed] from the intrinsic evidence in the record.” *Phillips* 415 F.3d at 1314 (citing *Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc.*, 375 F.3d 1341, 1351 (Fed. Cir. 2004)). The district court in *Dynocom v. Mainline* also construed “connected directly” and “fixed positions” the same as the parties do here. Ex. B at 5 (construing “connected directly” the same), 6 (construing “fixed positions” the same).

### IV. Disputed Constructions

The parties dispute the definitions for “secured to,” co-axially rotate,” “outwardly extending support arm,” “arm lock,” and “support foot assembly” (Dkt. No. 37). With the exception of the disputed term “secured to,” all of these terms were previously construed by the

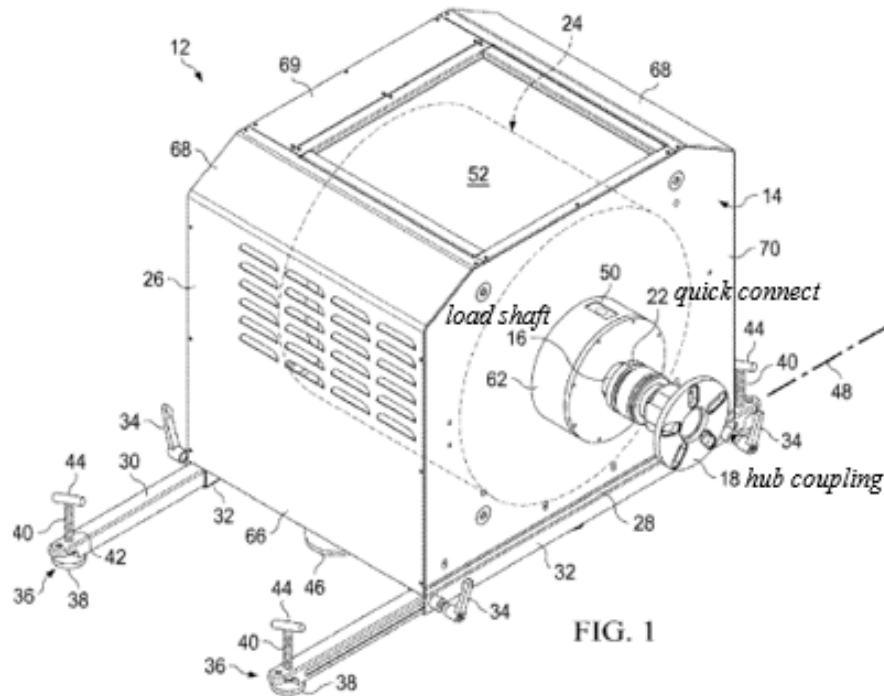
district court in *Dynocom v. Mainline*, and all of Plaintiff’s proposed constructions follow those in the prior ruling.

**A. “Secured To”**

<b>Term</b>	<b>Plaintiff’s Construction</b>	<b>Defendant’s Construction</b>
secured to	connected to with or without intervening parts	fixed or attached to, so as to not come apart from

In the context of the ‘374 Patent, the plain and ordinary meaning of “secured to” is readily understandable to POSITA. This term is used consistently in the claims and specification to refer to device components that are connected either with or without intervening parts.

For example, Claim 1 describes “a hub coupling *secured to* a first end of said load shaft and connected directly to the drive shaft...” Ex. A, 6:28-29 (emphasis added). The Abstract of the ‘374 Patent also describes how the “hub coupling (**18**) is *secured to* a first end of the load shaft (**16**)...” Ex. A (emphasis added). The connection between the hub coupling and the load shaft may include an intervening quick-connect coupler. This is shown a number of times in the drawings; however, Fig. 1, which clearly shows this intervening component, is reproduced and annotated below for convenience.



As is described in the specification, “[t]he load shaft **16** is *secured* with a hub coupling **18**, a universal joint **20**, and a quick connect **22** to an eddy current brake **24**.” Ex. A, 2:24-26 (emphasis added). The quick connect coupler is clearly illustrated between the hub coupling and the load shaft in Fig. 1, and the specification also describes how “the quick connect **22**...is mounted on a first end to the load shaft **16** and on a second end to the hub coupling **18**.” Ex. A, Fig. 8, 4:40-42. In other words, the quick-connect coupler is an optional intervening part that secures the load shaft and the hub coupling together. Hence, including the quick-connect coupler in the specification and the drawings indicates that the phrase “secured to” should encompass the scope of embodiments using an intervening part – such as the quick-connect coupler – between the load shaft and the hub coupling.

Similar to the hub coupling and the load shaft, other components of the POD are described as being secured together even when there are intervening parts between them. Specifically, “[t]he stator coils **94** are *secured to* the mounting ring **92**...” Ex. A, Fig. 6, 4:14-15. However, there are

a number of intervening parts between the stator coils and the mounting ring, including, the “u-shaped arms **122**” and the “stator gap adjustment sleeves **96**.” Ex. A, Fig. 6, 4:19-20, 26. The specification even describes two dynamometers as being “secured together” while there are clearly intervening parts between them:

FIG. 12 is a perspective view of two PODS **12** which are secured together for securing to two separate axles for determining the combined power output from the two separate axles of an all-wheel drive vehicle. The PODS **12** have connectors **162** which are secured to the outward ends of respective ones of the load shaft **16**. Ninety degree gear boxes **164** connect to the PODS **12** and are connected together by a coupling shaft **166**.

Ex. A, Fig. 12, 5:15-22.

Components of the POD are also described as being secured together when there are no intervening parts between them. For example, “[g]rip handles **44** [are] rigidly *secured to* respective ones of the upper ends of the rods **40**...” Ex. A, Fig. 3, 2:55-56 (emphasis added). “A mounting ring **92** is *secured to* the outer sleeve of the bearing **90**.” Ex. A, Figs. 4-5, 3:47-48 (emphasis added). “Lock nuts **126** are threadingly *secured to* the outward ends of the threaded rods **124**. Threaded rods **128** are *secured to* the outward ends of the stator gap adjustment sleeves **96** and lock nuts **130** are *secured to* the outward ends of the threaded rods **128**.” Ex. A, Fig. 7, 4:25-30 (emphasis added). All of the foregoing components are connected without intervening parts.

Defendant’s proposed construction is wrong. “Secured to” cannot mean “fixed or attached to, so as to not come apart from” because many, if not all, of the above-described components can be detached from one another even though the specification describes them as being secured together.

Take, for example, the hub coupling, which is secured to the load shaft by a quick connect coupler in at least one embodiment. Ex. A, Fig. 8, 4:40-42. This quick connect coupler is also described in Claim 6 as “a quick-*disconnect* coupler” for “*securing* a hub adapter [to the POD].”



Ex. A, 6:57-59 (emphasis added). In other words, the quick connect component allows the hub coupling to be quickly connected to and disconnected from the load shaft. When the hub coupling and load shaft are connected in this non-permanent way, the specification describes them as being secured together. Ex. A, Abstract, Fig. 1, 2:24-26.

Similarly, when referring to Fig. 7, the specification describes how the “[l]ock nuts **126** are threadingly *secured to* the outward ends of the threaded rods **124**. Threaded rods **128** are *secured to* the outward ends of the stator gap adjustment sleeves **96** and lock nuts **130** are *secured to* the outward ends of the threaded rods **128**.” Ex. A, Fig. 7, 4:25-30 (emphasis added). It is clear from the drawing and this description that these components are not permanently connected, but rather can easily be disconnected by twisting the lock nuts.

Thus, it is clear from reading the entire ‘374 Patent that the plain and ordinary meaning of “secured to” is “connected to with or without intervening parts,” as proposed by Dynocom. *See Phillips*, 415 F.3d at 1321 (“the ‘ordinary meaning’ of a claim term is its meaning to the ordinary artisan after reading the entire patent”). Contrary to Defendant’s construction, Plaintiff’s construction is supported by the intrinsic record and should be adopted.

#### **B. “Co-Axially Rotate”**

<b>Term</b>	<b>Plaintiff’s Construction</b>	<b>Defendant’s Construction</b>
co-axially rotate	rotate on a common axis that includes an alignment tolerance suitable for the dynamometer application	to rotate around a single common axis

The parties agree that dynamometers made in accordance with the ‘374 Patent have two co-axially rotating shafts, one being part of the vehicle (i.e., “the drive shaft”) and the other being part of the POD (i.e., “the load shaft”). The parties also agree that co-axial rotation refers to rotation around a common axis; however, the parties dispute the degree of axial alignment required when

these shafts are rotating. Plaintiff's construction, which is supported by the intrinsic record, clarifies that only an "alignment tolerance suitable for the dynamometer application" is required for co-axial rotation – perfect alignment is not. On the other hand, Defendant's construction ultimately leaves the finder of fact in the dark about the degree of misalignment permitted, which is improper. *Promptu Systems Corp. v. Comcast Corp.*, 92 F.4th 1372, 1380 (Fed. Cir. 2024)("[t]he purpose of claim construction is...to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement")(internal quotations omitted).

The language of Claim 1 at issue states that "said drive shaft and said load shaft *co-axially rotate*." Ex. A, 6:30-31 (emphasis added). Dynocom's construction of co-axial rotation is consistent with the intended use of the POD as understood by one having ordinary skill in the art. Specifically, the '374 Patent explains that misalignment of the rotating shafts is inherent in the use of a dynamometer, and the illustrated embodiment has "degrees of movement for *misalignment*" so that power is effectively transferred. Ex. A, Fig. 9, 4:50-53 (emphasis added). The '374 Patent further explains that when in use, the alignment of the two shafts "can change angle to allow for *misalignment* in the vehicles suspension via levelling pads/feet and tilting or rotating among its castors/ball castors, and such." Ex. A, 6:7-10 (emphasis added).

Thus, after reading the entire '374 Patent, POSITA would understand that although the drive shaft and the load shaft must "rotate on a common axis," the common axis is one "that includes an alignment tolerance suitable for the dynamometer application." Ex. B at 8. The district court in *Dynocom v. Mainline* previously construed co-axial rotation in this way and rejected the Mainline Defendants' contention that a common axis requires perfect alignment. Ex. B at 8 (rejecting the argument that "a 'common axis' requires the recited shafts to be perfectly aligned," because this would limit the scope of invention to a single disclosed embodiment); *see Phillips*,

415 F.3d at 1323 (“the claims of a patent must [not] be construed as being limited to [a single] embodiment”). The Court should do the same here.

**C. “Outwardly Extending Support Arm”**

<b>Term</b>	<b>Plaintiff’s Construction</b>	<b>Defendant’s Construction</b>
outwardly extending support arm	support arm that is capable of extending outward from the frame to provide a wider footprint	a support arm capable of extending outward from the frame in a direction that provides a wider footprint for the POD and provides leverage against the torsional forces on the load shaft when the POD is in use

The parties agree that an “outwardly extending support arm” is a “support arm that is capable of extending outward from the frame to provide a wider footprint.” However, the parties’ proposed constructions differ in that Dynocom suggests construing this limitation only to the extent needed to interpret what the plain and ordinary meaning of the disputed term is, whereas Defendant wrongly seeks to import numerous limitations from the specification into the claims, which is impermissible. *See, e.g., Phillips*, 415 F.3d at 1320 (“one of the cardinal sins of patent law [is] reading a limitation from the written description into the claims”); *Hoganas AB v. Dresser Indus., Inc.*, 9 F.3d 948, 950 (Fed. Cir. 1993)(it is improper “to add extraneous limitations to a claim, that is, limitations added wholly apart from any need to interpret what the patentee meant by particular words or phrases in the claim”)(internal citations omitted).

Here, the plain language of Claim 1 mandates that a support arm must extend outward from the frame because the support arms are claimed as being “outwardly extending” from “said rigid frame.” Ex. A, 6:32-33. The specification confirms this when it explains that “[f]our support arms **30** extend outward from open ends of the receiver tubes **32**,” which are connected to the “frame **64**.” Ex. A, Fig. 3, 2:40-41, 3:8. The specification further states that the “[s]upport arms are

extended to *provide a wider footprint* for the POD...” Ex. A, 5:54-55 (emphasis added). This “wider footprint” is apparent in every single disclosed embodiment of a dynamometer. Ex. A, Figs. 1-3, 11-14.

The specification also states that the purpose of extending the support arms is to “assist in providing leverage for the torsional forces when in use.” Ex. A, 5:55-56. However, this purpose is only mentioned a single time in the specification, and “it is improper to read limitations from a preferred embodiment...into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004). There has been no such clear indication here. In fact, there has been the opposite.

Namely, the '374 Patent discloses at least one embodiment where the support arms do not provide leverage against the torsional forces. Fig. 14 shows “an alternate configuration for a POD **190** having...two support legs **194** which are *pivotaly secured* within a vertically disposed channel for storage, and then which may be extended downward for supporting the POD **190**.” Ex. A, Fig. 14, 5:32-39 (emphasis added). These alternate support arms contact the ground at angles. Ex. A, Fig. 14, 2:15-16 (describing “angled support arms”).

Thus, the plain and ordinary meaning of “outwardly extending support arm” is a “support arm that is capable of extending outward from the frame to provide a wider footprint,” as the district court in *Dynocom v. Mainline* also concluded. Ex. B at 5. Defendant’s construction cannot be adopted because it impermissibly attempts to add additional limitations to what is a clear and easy to understand claim term. Defendant’s construction would also improperly exclude a disclosed embodiment from the scope of the asserted claims, namely, an embodiment where the support arms *do not* provide leverage against torsional forces. *See Broadcom Corp. v. Emulex*

*Corp.*, 732 F.3d 1325, 1333 (Fed. Cir. 2013)(“an interpretation which excludes a [disclosed] embodiment from the scope of the claim is rarely, if ever correct.”)(internal quotations omitted). On the other hand, Plaintiff’s construction remains focused on understanding how POSITA would understand the disputed term and should be adopted. *See Phillips*, 415 F.3d at 1323 (“the distinction between using the specification to interpret the meaning of a claim and importing limitations from the specification into the claim...can be discerned with reasonable certainty and predictability if the court’s focus remains on understanding how [POSITA] would understand the claim terms.”)(internal citations omitted).

**D. “Arm Lock”**

<b>Term</b>	<b>Plaintiff’s Construction</b>	<b>Defendant’s Construction</b>
arm lock	device capable of securing the support arm in a fixed position	a device which can be engaged to secure the arm in a fixed position and can be disengaged to allow arm movement to other positions

The dispute over this claim term is identical to and literally connected to the “outwardly extending support arm.” Once again, Dynocom submits a construction consistent with the intrinsic evidence while Defendant seeks to add numerous limitations to the claim through unduly narrowing interpretations.

Both Claim 1 and the specification state that the “rigid frame” has “*arm locks* which secure” the “outwardly extending support arms in *fixed positions*.” Ex. A, 1:36-39, 6:32-34 (emphasis added). In describing the illustrated embodiments, the specification further states that “[a]rm locks **34** are provided for securing the support arms **30** in retracted and in extended positions.” Ex. A, 2:44-45. The drawings illustrate both the retracted and extended positions for the support arms, and it is clear that both positions are fixed. Ex. A, Fig. 1-3, 11-13.

Thus, it is clear from the intrinsic evidence that the plain and ordinary meaning of “arm lock” is a “device capable of securing the support arm in a fixed position,” as previously determined by the district court in *Dynocom v. Mainline*. Ex. B at 5-6. Defendant’s construction seeks to commit a cardinal sin of claim construction by importing limitations from the specification, restricting the definition of “arm lock” to a device that can be “engaged” and “disengaged to allow arm movement.” This finds no support in the intrinsic record and should not be adopted. On the other hand, Plaintiff’s construction is found nearly verbatim in the claims, the specification, and a prior ruling; it should be adopted.

**E. “Support Foot Assembly”**

<b>Term</b>	<b>Plaintiff’s Construction</b>	<b>Defendant’s Construction</b>
support foot assembly	assembly that engages the floor or ground surface located beneath the dynamometer for support	an assembly of elements consisting of a foot which engages with the floor or ground on which the POD rests, a rod extending upward from the foot and having a threaded surface, and a threaded aperture in or attached to the support arm such that the rod and foot can be turned to extend and retract to and from the floor or ground

Once more, Defendant’s construction for a disputed term reads like a separate claim instead of a definition, urging the impermissible importing of numerous limitations from the specification into the claims such as “a rod extending upward from the foot and having a threaded surface,” “a threaded aperture in or attached to the support arm,” “the rod and foot can be turned to extend and retract to and from the floor or ground.” None of these limitations are necessary to understand the plain meaning of “support foot assembly” and cannot be adopted.

The plain language of Claim 1 only requires that the “support feet assemblies” be mounted to “outer ends of said support arms.” Ex. A, 6:35-36. The specification explains that “[f]eet assembly **36** are mounted to outward ends of the support arms **30** and extend downward for

vertically *engaging a floor or a ground surface located beneath the POD 12.*” Ex. A, 2:45-48 (emphasis added). In other words, a support foot assembly is mounted to an outer end of the support arm and “engages the floor or ground surface located beneath the dynamometer.”

As proposed by Dynocom, this limitation simply means that there is an identifiable structure to support the dynamometer, and the district court in *Dynocom v. Mainline* agrees. Ex. B at 6. Alternatively, Defendant improperly seeks to rewrite the plain language of Claim 1 to include a number of limitations which may be found only in the specification of the ‘374 Patent. *See, e.g., Phillips*, 415 F.3d at 1320 (“one of the cardinal sins of patent law [is] reading a limitation from the written description into the claims”); *Hoganas*, 9 F.3d at 950 (it is improper “to add extraneous limitations to a claim”). Plaintiff’s construction should be adopted.

## **V. Conclusion**

For the foregoing reasons, Plaintiff respectfully requests that the Court adopt its proposed constructions of the disputed claim terms.

Date: August 7, 2024

Respectfully submitted by,

*Attorneys for Plaintiff*  
Dynocom Industries, Inc.

/s/ Justin P. Tinger  
Justin P. Tinger (BBO# 707807)  
Brendan M. Shortell (BBO# 675851)  
David J. Connaughton (BBO# 679451)  
Lambert Shortell & Connaughton  
100 Franklin Street, Suite 903  
Boston, MA 02110  
Telephone: 617.720.0091  
[tinger@lambertpatentlaw.com](mailto:tinger@lambertpatentlaw.com)  
[shortell@lambertpatentlaw.com](mailto:shortell@lambertpatentlaw.com)  
[connaughton@lambertpatentlaw.com](mailto:connaughton@lambertpatentlaw.com)

**CERTIFICATE OF SERVICE**

I certify that I served the foregoing on counsel of record via the Court's ECF filing system.

Date: August 7, 2024

/s/ Justin P. Tinger